Data Validation Checklist Semivolatile Organic Analyses

Project:	35 TH Avenue Superfund Site	Project No: <u>152</u>	68508.20000
Laboratory:	TestAmerica - Savannah, GA ¹	Job ID.: <u>680</u>	-87545-4
Method:	SW-846 8270C Low-Level (PAH)	Associated Samples:	Refer to Attachment A (Sample Summary)
Matrix:	Soil	Samples Collected:	02/14/2013 & 02/15/2013
Reviewer:	Karen Marie Trujillo	Date:	03/11/2013
Concurrence ² :	Nicole Lancaster / Martha Meyers-Lee	Date:	03/28/2013

	Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1.	Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	√	- 10			
2.	Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3.	Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4.	Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5.	Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	√				
6.	Were results for all project-specified target analytes reported?	✓				
7.	Were project-specified Reporting Limits achieved for undiluted sample analyses?	√				
8.	Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.		√			
9.	Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10.	Were target analytes detected in the method blank?	✓			MB 660-134788/1-A: Phenanthrene @ 3.99 J μg/Kg (RL 8.0, MDL 3.9)	
11.	Were target analytes detected in equipment/rinsate blanks?		√		PAHs were not detected during the analysis of rinsate blank 021213-RB-Shovel (680-87747-31).	

 $^{^1}$ All analytical work subcontracted to TestAmerica of Tampa, FL 2 Independent technical reviewer URS Group, Inc. Page 1 of 5

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	165	\(\sqrt{\pi}\)	IVA	According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank, 021213-RB-Shovel (680-87747-31) was collected during the week of 02/11/13. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87747-2.	Гіад
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)	*			Phenanthrene blank contamination action level (BCAL) is 19.95 µg/Kg (3.99 µg/Kg x 5) ³ . Sample-specific BCALs were developed by multiplying the BCAL by the sample dilution factor and dividing it by the percent solids. Sample results that were less than sample-specific BCALs have been qualified due to the presence of blank contamination. The sample detection limit has been elevated to the amount of phenanthrene found in the sample and U-flagged.	U
14. Is a field duplicate associated with this Job?	√			FM0161UU-CSD (680-87545-70) is a field duplicate of FM0161UU-CS (680-87545-69).	
15. Was precision deemed acceptable as defined by the project plans?		✓		Refer to Attachment B (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	√			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	√				
 18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. An initial calibration is to be associated with each sample analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			 Instrument ID: BSMA5973 Initial Calibration: 02/22/2013 ICV: 02/22/13 @ 12:48 CCV: 02/25/13 @ 14:59 Instrument ID: BSMD5973 Initial Calibration: 02/22/2013 ICV: 02/22/13 @ 14:51 CCV: 02/26/13 @ 14:04 	

 $^{^3}$ BCAL developed based on the maximum amount observed in all blanks URS Group, Inc. Page 2 of 5

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
 19. Were calibration results within laboratory/project specifications? ICAL (Criteria: ≤15 mean %RSD with individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR r²≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): If %RSD>15 (>50% for poor performers), or r <0.995, or r² <0.995, then J-flag positive results and UJ-flag non-detects If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)): If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds 		•		ICV of 02/22/13 @ 12:48, instrument BSMA5973: 2-Methylnaphthalene @ 22.1 %D (Lab: ≤35, Project: ≤20). Positive bias is indicated by the CCV percent difference; therefore, J-flag 2-methylnaphthalene results in associated samples ⁴ .	J
20. Was a LCS prepared for each batch and matrix?	√				
 21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <lower (lcl).<="" control="" li="" limit=""> 22. Were LCS/LCSD RPD within lab specifications? If no, J-flag </lower>	√		√	LCS Only	
positive results and UJ-flag non-detects 23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	√			 Prep Batch 134788: 680-87545-61 (FM0161AQ-GS), MS/MSD Prep Batch 134750: 680-87545-41 (FM0161DD-CS), MS/MSD. Lab sample 680-87545-41 is a project-specific sample (FM0161DD-CS) that was selected by TestAmerica for the PAH MS and MSD analyses, and the results were reported under Job ID 680-87545-3. 	
25. Were MS/MSD recoveries within laboratory/project specifications? Only QC results for project samples that are reported under this Job ID are evaluated.		√		FM0161AQ-GS (680-87545-61): • Benzo[a]anthracene @ 122 and 138 %R (40-130). Qualification of data not required ⁵ .	J

⁴ 680-87545-62 through -69
⁵ The recovery of either the MS or MSD met control limits. URS Group, Inc. Page 3 of 5

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
 If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD %R<10: J and R Flag positive and ND results, respectively MS and MSD %R >10 and <lcl: and="" j-flag="" li="" non-detect="" positive="" results<="" uj-flag=""> MS and MSD R% >UCL (or 140): J-Flag positive results </lcl:>				 Benzo[b]fluoranthene @ 116 and 148 %R (37-130). Qualification of data not required⁴. Benzo[k]fluoranthene @ 108 and 134 % R (32-130). Qualification of data not required⁴. Chrysene @ 103 and 138 %R (41-130). Qualification of data not required⁴. Fluoranthene @ 141 and 183 (40-130), J-flag. Phenanthrene @ 114 and 141 (42-130). Qualification of data not required⁴. Pyrene @ 127 and 162 %R (44-130). Qualification of data not required⁴. 	
 26. Were laboratory criteria met for precision during the MS/MSD analysis? Only QC results for project samples that are reported under this Job ID are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 	✓				
 Were surrogate recoveries within lab/project specifications? If %R for 1 Acid or BN surrogates <10, then J-flag positive and R-flag non-detect associated sample results If 2 or more Acid or BN %R >UCL, then J-flag positive results If 2 or more Acid or BN %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> If 2 or more Acid or BN , with 1 %R >UCL and 1 %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> </lcl,></lcl,>	*				
 28. Were internal standard (IS) results within lab/project specifications? If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non- 	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
detect results					
• If retention time of sample's internal standard is not within					
30 seconds of the associated calibration standard, R-flag associated data.					
 The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that 					
sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.					
29. Were lab comments included in report?	✓			Refer to Attachment C (Case Narrative)	

Comments: The data validation was conducted in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012). The data review process was modeled after the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review (EPA, October 1999) and USEPA CLP NFG for Low Concentration Organic Methods Data Review (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

- I The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-4

SDG: 68087545-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87545-61	FM0161AQ-GS	Solid	02/14/13 14:35	02/16/13 09:03
680-87545-62	FM0161AR-GS	Solid	02/14/13 14:47	02/16/13 09:0
680-87545-63	FM0161AS-GS	Solid	02/14/13 15:23	02/16/13 09:0
680-87545-64	FM0161AT-GS	Solid	02/14/13 15:33	02/16/13 09:0
680-87545-65	FM0161AU-GS	Solid	02/14/13 16:22	02/16/13 09:0
680-87545-66	FM0161RR-CS	Solid	02/14/13 15:52	02/16/13 09:03
680-87545-67	FM0161SS-CS	Solid	02/14/13 15:58	02/16/13 09:0
680-87545-68	FM0161TT-CS	Solid	02/14/13 16:00	02/16/13 09:0
680-87545-69	FM0161UU-CS	Solid	02/14/13 16:05	02/16/13 09:0
680-87545-70	FM0161UU-CSD	Solid	02/14/13 16:07	02/16/13 09:0
680-87545-71	FM0161VV-CS	Solid	02/14/13 16:09	02/16/13 09:0
80-87545-72	FM0161WW-CS	Solid	02/14/13 16:15	02/16/13 09:0
680-87545-73	FM0161XX-CS	Solid	02/14/13 16:18	02/16/13 09:0
680-87545-74	FM0161YY-CS	Solid	02/14/13 16:21	02/16/13 09:0
80-87545-75	FM0161ZZ-CS	Solid	02/14/13 16:31	02/16/13 09:0
680-87545-79	CV0367A-CS-SP	Solid	02/15/13 08:52	02/16/13 09:0
880-87545-80	CV0367B-CS-SP	Solid	02/15/13 08:27	02/16/13 09:0
80-87545-81	FM0161AAA-CS	Solid	02/15/13 08:32	02/16/13 09:0
880-87545-82	FM0161BBB-CS	Solid	02/15/13 08:39	02/16/13 09:0
80-87545-83	FM0161CCC-CS	Solid	02/15/13 08:47	02/16/13 09:0

ATTACHMENT B FIELD DUPLICATE EVALUATION

Analyte	FM0161UU-CS 680-87545-69		RL	FM0161UU-CSD 680-87545-70		RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	15	J	41	15	J	41	μg/kg	205	NA	0	82	None, absolute difference ≤ 2x Avg RL
Anthracene	29		8.7	27		8.7	μg/kg	43.5	NA	2	17.4	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	84		8.3	84		8.2	μg/kg	41.25	0	NA	NA	None, RPD $\leq 50\%$
Benzo(a)pyrene	44		11	83		11	μg/kg	55	NA	39	22	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(b)fluoranthene	90		13	160		13	μg/kg	65	56	NA	NA	J/UJ-flag, RPD > 50%
Benzo(g,h,i)perylene	39		21	63		21	μg/kg	105	NA	24	42	None, absolute difference $\leq 2x$ Avg RL
Benzo(k)fluoranthene	38		8.3	44		8.2	μg/kg	41.25	NA	6	16.5	None, absolute difference $\leq 2x$ Avg RL
Chrysene	98		9.3	140		9.3	μg/kg	46.5	35	NA	NA	None, RPD $\leq 50\%$
Dibenzo(a,h)anthracene	12	J	21	21		21	μg/kg	105	NA	9	42	None, absolute difference $\leq 2x$ Avg RL
Fluoranthene	60		21	150		21	μg/kg	105	NA	90	42	J/UJ-flag, absolute difference > 2x Avg RL
Fluorene	6.1	J	21	8.6	J	21	μg/kg	105	NA	2.5	42	None, absolute difference $\leq 2x$ Avg RL
Indeno(1,2,3-cd)pyrene	35		21	58		21	μg/kg	105	NA	23	42	None, absolute difference $\leq 2x$ Avg RL
1-Methylnaphthalene	30	J	41	53		41	μg/kg	205	NA	23	82	None, absolute difference $\leq 2x$ Avg RL
2-Methylnaphthalene	34	J	41	65		41	μg/kg	205	NA	31	82	None, absolute difference $\leq 2x$ Avg RL
Naphthalene	35	J	41	67		41	μg/kg	205	NA	32	82	None, absolute difference $\leq 2x$ Avg RL
Phenanthrene	57		8.3	120 H	В	8.2	μg/kg	41.25	71	NA	NA	J/UJ-flag, RPD > 50%
Pyrene	56		21	120		21	μg/kg	105	NA	64	42	J/UJ-flag, absolute difference > 2x Avg RL

Note: If the analyte was not detected, then the cell was left blank.

μg/kg - micrograms per kilogram

B - Compound was found in the blank and sample

J - Estimated vlaue

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C
CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-4

SDG: 68087545-4

Job ID: 680-87545-4

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87545-4

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

The samples were received on 02/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8° C and 3.4° C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples FM0161AQ-GS (680-87545-61), FM0161AR-GS (680-87545-62), FM0161AS-GS (680-87545-63), FM0161AT-GS (680-87545-64), FM0161AU-GS (680-87545-65), FM0161RR-CS (680-87545-66), FM0161SS-CS (680-87545-67), FM0161TT-CS (680-87545-68), FM0161UU-CS (680-87545-69), FM0161UU-CSD (680-87545-70), FM0161VV-CS (680-87545-71), FM0161WW-CS (680-87545-72), FM0161XX-CS (680-87545-73), FM0161YY-CS (680-87545-74), FM0161ZZ-CS (680-87545-75), CV0367A-CS-SP (680-87545-79), CV0367B-CS-SP (680-87545-80), FM0161AAA-CS (680-87545-81), FM0161BBB-CS (680-87545-82) and FM0161CCC-CS (680-87545-83) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/22/2013 and 02/25/2013 and analyzed on 02/25/2013 and 02/26/2013.

Samples FM0161AQ-GS (680-87545-61)[4X], FM0161AU-GS (680-87545-65)[4X], FM0161TT-CS (680-87545-68)[4X], FM0161VV-CS (680-87545-71)[4X], FM0161XX-CS (680-87545-73)[4X], CV0367A-CS-SP (680-87545-79)[4X] and CV0367B-CS-SP (680-87545-80)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The method blank for preparation batch 134788 contained phenanthrene above the method detection limit (MDL), but below the reporting limit (RL). The daily instrument blank was clean. The associated samples contained detects for this analyte at concentrations greater than 10X the value found in the method blank; therefore, re-extraction and re-analysis of samples were not performed. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample FM0161AQ-GSMS (680-87545-61) in batch 660-134863.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample 680-87545-41 in batch 660-134820.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

ATTACHMENT D QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-61

Matrix: Solid

Percent Solids: 80.5

Client Sample ID: FM0161AQ-GS

Date Collected: 02/14/13 14:35 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	500	U	500	99	ug/Kg	<u>\$</u>	02/25/13 06:16	02/26/13 16:22	4
Acenaphthylene	200	U	200	25	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Anthracene	55		42	21	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Benzo[a]anthracene	270	#	40	19	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Benzo[a]pyrene	280		52	26	ug/Kg	₩	02/25/13 06:16	02/26/13 16:22	4
Benzo[b]fluoranthene	480	y	60	30	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Benzo[g,h,i]perylene	240		99	22	ug/Kg	\$	02/25/13 06:16	02/26/13 16:22	4
Benzo[k]fluoranthene	160	F	40	18	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Chrysene	420	×	45	22	ug/Kg	₩	02/25/13 06:16	02/26/13 16:22	4
Dibenz(a,h)anthracene	63	J	99	20	ug/Kg	\$	02/25/13 06:16	02/26/13 16:22	4
Fluoranthene	630	≁ J	99	20	ug/Kg	₩	02/25/13 06:16	02/26/13 16:22	4
Fluorene	26	J	99	20	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Indeno[1,2,3-cd]pyrene	210		99	35	ug/Kg	\$	02/25/13 06:16	02/26/13 16:22	4
1-Methylnaphthalene	120	J	200	22	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
2-Methylnaphthalene	140	J	200	35	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Naphthalene	140	J	200	22	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Phenanthrene	400	BF	40	19	ug/Kg	₽	02/25/13 06:16	02/26/13 16:22	4
Pyrene	460	F	99	18	ug/Kg	₩	02/25/13 06:16	02/26/13 16:22	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl			30 - 130				02/25/13 06:16	02/26/13 16:22	4

Client Sample ID: FM0161AR-GS

Date Collected: 02/14/13 14:47 Date Received: 02/16/13 09:03

o-Terphenyl

Lab Sample ID: 680-87545-62

Matrix: Solid Percent Solids: 69.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	*	02/22/13 09:08	02/25/13 23:46	1
Acenaphthylene	10	J	57	7.1	ug/Kg	₽	02/22/13 09:08	02/25/13 23:46	1
Anthracene	27		12	6.0	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Benzo[a]anthracene	73		11	5.5	ug/Kg	\$	02/22/13 09:08	02/25/13 23:46	1
Benzo[a]pyrene	44		15	7.4	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Benzo[b]fluoranthene	74		17	8.7	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Benzo[g,h,i]perylene	37		28	6.3	ug/Kg	\$	02/22/13 09:08	02/25/13 23:46	1
Benzo[k]fluoranthene	30		11	5.1	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Chrysene	89		13	6.4	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Dibenz(a,h)anthracene	12	J	28	5.8	ug/Kg	\$	02/22/13 09:08	02/25/13 23:46	1
Fluoranthene	87		28	5.7	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Fluorene	11	J	28	5.8	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Indeno[1,2,3-cd]pyrene	28		28	10	ug/Kg	\$	02/22/13 09:08	02/25/13 23:46	1
1-Methylnaphthalene	59		57	6.3	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
2-Methylnaphthalene	76	J	57	10	ug/Kg	₩	02/22/13 09:08	02/25/13 23:46	1
Naphthalene	89		57	6.3	ug/Kg	\$	02/22/13 09:08	02/25/13 23:46	1
Phenanthrene	130		11	5.5	ug/Kg	₽	02/22/13 09:08	02/25/13 23:46	1
Pyrene	67		28	5.3	ug/Kg	₽	02/22/13 09:08	02/25/13 23:46	1

TestAmerica Savannah

Page 6 of 31

30 - 130

47

TestAmerica Job ID: 680-87545-4

SDG: 68087545-4

Client Sample ID: FM0161AS-GS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 02/14/13 15:23 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-63

Matrix: Solid Percent Solids: 82.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	\	02/22/13 09:08	02/26/13 00:01	1
Acenaphthylene	7.2	J	48	6.0	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Anthracene	110		10	5.0	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Benzo[a]anthracene	510		9.5	4.6	ug/Kg	\$	02/22/13 09:08	02/26/13 00:01	1
Benzo[a]pyrene	230		12	6.2	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Benzo[b]fluoranthene	320		15	7.3	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Benzo[g,h,i]perylene	110		24	5.2	ug/Kg	\$	02/22/13 09:08	02/26/13 00:01	1
Benzo[k]fluoranthene	200		9.5	4.3	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Chrysene	410		11	5.4	ug/Kg	☼	02/22/13 09:08	02/26/13 00:01	1
Dibenz(a,h)anthracene	50		24	4.9	ug/Kg	\$	02/22/13 09:08	02/26/13 00:01	1
Fluoranthene	880		24	4.8	ug/Kg	☼	02/22/13 09:08	02/26/13 00:01	1
Fluorene	32		24	4.9	ug/Kg	☼	02/22/13 09:08	02/26/13 00:01	1
Indeno[1,2,3-cd]pyrene	110		24	8.5	ug/Kg	*	02/22/13 09:08	02/26/13 00:01	1
1-Methylnaphthalene	14	J	48	5.2	ug/Kg	☼	02/22/13 09:08	02/26/13 00:01	1
2-Methylnaphthalene	21	🔏 J	48	8.5	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Naphthalene	23	J	48	5.2	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Phenanthrene	440		9.5	4.6	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Pyrene	720		24	4.4	ug/Kg	₽	02/22/13 09:08	02/26/13 00:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	58		30 - 130				02/22/13 09:08	02/26/13 00:01	1

Client Sample ID: FM0161AT-GS

Date Collected: 02/14/13 15:33 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-64

Matrix: Solid Percent Solids: 98.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	98	U	98	20	ug/Kg	<u> </u>	02/22/13 09:08	02/26/13 00:17	
Acenaphthylene	39	U	39	4.9	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Anthracene	8.3	U	8.3	4.1	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Benzo[a]anthracene	15		7.9	3.8	ug/Kg	*	02/22/13 09:08	02/26/13 00:17	
Benzo[a]pyrene	7.4	J	10	5.1	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Benzo[b]fluoranthene	9.3	J	12	6.0	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Benzo[g,h,i]perylene	5.7	J	20	4.3	ug/Kg	*	02/22/13 09:08	02/26/13 00:17	
Benzo[k]fluoranthene	5.1	J	7.9	3.5	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Chrysene	8.7	J	8.9	4.4	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Dibenz(a,h)anthracene	20	U	20	4.0	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Fluoranthene	9.0	J	20	3.9	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Fluorene	20	U	20	4.0	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
ndeno[1,2,3-cd]pyrene	7.6	J	20	7.0	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
-Methylnaphthalene	6.6	J	39	4.3	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
2-Methylnaphthalene	39	U	39	7.0	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Naphthalene	8.7	J	39	4.3	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Phenanthrene	12	U	7.9	3.8	ug/Kg	₩	02/22/13 09:08	02/26/13 00:17	
Pyrene	9.0	J	20	3.6	ug/Kg	⇔	02/22/13 09:08	02/26/13 00:17	

TestAmerica Savannah

Analyzed

02/26/13 00:17

Prepared

02/22/13 09:08

Page 7 of 31

Limits

30 - 130

%Recovery Qualifier

57

3/1/2013

Dil Fac

-4

6

Revision 1

Alabama,

nam.

TestAmerica Job ID: 680-87545-4 SDG: 68087545-4

Percent Solids: 92.1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-65

Matrix: Solid

Client Sample ID: FM0161AU-GS

Date Collected: 02/14/13 16:22
Date Received: 02/16/13 09:03

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels MDL Unit Analyte Result Qualifier D Prepared Analyzed Dil Fac ₩ Acenaphthene 430 Ū 430 85 02/22/13 09:08 02/26/13 00:32 4 ug/Kg 170 U 170 02/22/13 09:08 4 Acenaphthylene 02/26/13 00:32 21 ug/Kg ä **Anthracene** 42 36 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 ₽ 34 17 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 Benzo[a]anthracene 140 Ü 44 22 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 Benzo[a]pyrene 85 ₽ 52 02/22/13 09:08 02/26/13 00:32 Benzo[b]fluoranthene 130 26 ug/Kg ₽ Benzo[g,h,i]perylene 85 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 74 45 34 02/22/13 09:08 02/26/13 00:32 Benzo[k]fluoranthene ug/Kg 15 4 38 02/22/13 09:08 Chrysene 150 ug/Kg 02/26/13 00:32 Dibenz(a,h)anthracene 85 ug/Kg ₽ 28 17 02/22/13 09:08 02/26/13 00:32 85 02/22/13 09:08 02/26/13 00:32 4 **Fluoranthene** 190 17 ug/Kg Fluorene 85 U 85 ₩ 02/22/13 09:08 02/26/13 00:32 4 17 ug/Kg 85 4 Indeno[1,2,3-cd]pyrene 55 30 ug/Kg 02/22/13 09:08 02/26/13 00:32 ₩ 1-Methylnaphthalene 89 170 19 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 170 4 30 ug/Kg 02/22/13 09:08 02/26/13 00:32 2-Methylnaphthalene 100 ä 170 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 **Naphthalene** 100 34 02/22/13 09:08 4 **Phenanthrene** 200 17 ug/Kg 02/26/13 00:32 170 85 ug/Kg 02/22/13 09:08 02/26/13 00:32 4 **Pyrene** Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed o-Terphenyl 30 - 130 02/22/13 09:08 02/26/13 00:32 68

Client Sample ID: FM0161RR-CS

Date Collected: 02/14/13 15:52 Date Received: 02/16/13 09:03

o-Terphenyl

Lab Sample ID: 680-87545-66

Matrix: Solid Percent Solids: 98.1

nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cenaphthene	100	U	100	20	ug/Kg	\$	02/22/13 09:08	02/26/13 00:47	1
cenaphthylene	6.3	J	41	5.1	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
anthracene	11		8.6	4.3	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
Benzo[a]anthracene	47		8.2	4.0	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
Benzo[a]pyrene	25		11	5.3	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
Benzo[b]fluoranthene	50		12	6.2	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
Benzo[g,h,i]perylene	26		20	4.5	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
Benzo[k]fluoranthene	17		8.2	3.7	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
Chrysene	46		9.2	4.6	ug/Kg	₩	02/22/13 09:08	02/26/13 00:47	1
Dibenz(a,h)anthracene	13	J	20	4.2	ug/Kg	*	02/22/13 09:08	02/26/13 00:47	1
luoranthene	56		20	4.1	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
luorene	20	U	20	4.2	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
ndeno[1,2,3-cd]pyrene	23		20	7.2	ug/Kg	\$	02/22/13 09:08	02/26/13 00:47	1
-Methylnaphthalene	27	J	41	4.5	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
-Methylnaphthalene	34	🔏 J	41	7.2	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1
laphthalene	34	J	41	4.5	ug/Kg	\$	02/22/13 09:08	02/26/13 00:47	1
Phenanthrene	53		8.2	4.0	ug/Kg	₩	02/22/13 09:08	02/26/13 00:47	1
yrene	47		20	3.8	ug/Kg	₽	02/22/13 09:08	02/26/13 00:47	1

TestAmerica Savannah

02/26/13 00:47

02/22/13 09:08

30 - 130

55

ied by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingl

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-67 Matrix: Solid

Percent Solids: 97.4

Client Sample ID: FM0161SS-CS

Date Collected: 02/14/13 15:58 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	\	02/22/13 09:08	02/26/13 01:02	1
Acenaphthylene	6.6	J	41	5.1	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Anthracene	10		8.6	4.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Benzo[a]anthracene	55		8.2	4.0	ug/Kg	\$	02/22/13 09:08	02/26/13 01:02	1
Benzo[a]pyrene	32		11	5.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Benzo[b]fluoranthene	49		13	6.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Benzo[g,h,i]perylene	32		21	4.5	ug/Kg	\$	02/22/13 09:08	02/26/13 01:02	1
Benzo[k]fluoranthene	30		8.2	3.7	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Chrysene	53		9.2	4.6	ug/Kg	☼	02/22/13 09:08	02/26/13 01:02	1
Dibenz(a,h)anthracene	12	J	21	4.2	ug/Kg	\$	02/22/13 09:08	02/26/13 01:02	1
Fluoranthene	60		21	4.1	ug/Kg	☼	02/22/13 09:08	02/26/13 01:02	1
Fluorene	5.6	J	21	4.2	ug/Kg	☼	02/22/13 09:08	02/26/13 01:02	1
Indeno[1,2,3-cd]pyrene	23		21	7.3	ug/Kg	*	02/22/13 09:08	02/26/13 01:02	1
1-Methylnaphthalene	26	J	41	4.5	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
2-Methylnaphthalene	39	🖊 J	41	7.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Naphthalene	34	J	41	4.5	ug/Kg	*	02/22/13 09:08	02/26/13 01:02	1
Phenanthrene	53		8.2	4.0	ug/Kg	₩	02/22/13 09:08	02/26/13 01:02	1
Pyrene	49		21	3.8	ug/Kg	₽	02/22/13 09:08	02/26/13 01:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	44		30 - 130				02/22/13 09:08	02/26/13 01:02	

Client Sample ID: FM0161TT-CS

Date Collected: 02/14/13 16:00 Date Received: 02/16/13 09:03

o-Terphenyl

Lab Sample ID: 680-87545-68

Matrix: Solid Percent Solids: 93.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	86	ug/Kg	*	02/22/13 09:08	02/26/13 01:17	4
Acenaphthylene	170	U	170	21	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Anthracene	26	J	36	18	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Benzo[a]anthracene	99		34	17	ug/Kg	\$	02/22/13 09:08	02/26/13 01:17	4
Benzo[a]pyrene	47		44	22	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Benzo[b]fluoranthene	73		52	26	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Benzo[g,h,i]perylene	51	J	86	19	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Benzo[k]fluoranthene	41		34	15	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Chrysene	68		38	19	ug/Kg	₩	02/22/13 09:08	02/26/13 01:17	4
Dibenz(a,h)anthracene	22	J	86	18	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Fluoranthene	100		86	17	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Fluorene	86	U	86	18	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Indeno[1,2,3-cd]pyrene	33	J	86	30	ug/Kg	\$	02/22/13 09:08	02/26/13 01:17	4
1-Methylnaphthalene	33	J	170	19	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
2-Methylnaphthalene	57	∦ J	170	30	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Naphthalene	48	J	170	19	ug/Kg	\$	02/22/13 09:08	02/26/13 01:17	4
Phenanthrene	85	U	-34	17	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4
Pyrene	80	J	86	16	ug/Kg	₽	02/22/13 09:08	02/26/13 01:17	4

TestAmerica Savannah

02/26/13 01:17

02/22/13 09:08

Page 9 of 31

30 - 130

54

3/1/2013

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-69

Matrix: Solid Percent Solids: 97.1

Client Sample ID: FM0161UU-CS

Date Collected: 02/14/13 16:05 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	₩	02/22/13 09:08	02/26/13 01:32	
Acenaphthylene	15	J	41	5.2	ug/Kg	₩	02/22/13 09:08	02/26/13 01:32	
Anthracene	29		8.7	4.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	•
Benzo[a]anthracene	84		8.3	4.0	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Benzo[a]pyrene	44	J	11	5.4	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Benzo[b]fluoranthene	90	J	13	6.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Benzo[g,h,i]perylene	39		21	4.5	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Benzo[k]fluoranthene	38		8.3	3.7	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Chrysene	98		9.3	4.7	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Dibenz(a,h)anthracene	12	J	21	4.2	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Fluoranthene	60	J	21	4.1	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
luorene	6.1	J	21	4.2	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
ndeno[1,2,3-cd]pyrene	35		21	7.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
I-Methylnaphthalene	30	J	41	4.5	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
2-Methylnaphthalene	34	∦ J	41	7.3	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Naphthalene	35	J	41	4.5	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Phenanthrene	57	J	8.3	4.0	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Pyrene	56	J	21	3.8	ug/Kg	₽	02/22/13 09:08	02/26/13 01:32	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	44		30 - 130				02/22/13 09:08	02/26/13 01:32	

Date Collected: 02/14/13 16:07 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Percent Solids: 96.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	\	02/25/13 06:16	02/26/13 17:30	1
Acenaphthylene	15	J	41	5.2	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
Anthracene	27		8.7	4.3	ug/Kg	₩	02/25/13 06:16	02/26/13 17:30	1
Benzo[a]anthracene	84		8.2	4.0	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
Benzo[a]pyrene	83	J	11	5.4	ug/Kg	≎	02/25/13 06:16	02/26/13 17:30	1
Benzo[b]fluoranthene	160	J	13	6.3	ug/Kg	₩	02/25/13 06:16	02/26/13 17:30	1
Benzo[g,h,i]perylene	63		21	4.5	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
Benzo[k]fluoranthene	44		8.2	3.7	ug/Kg	≎	02/25/13 06:16	02/26/13 17:30	1
Chrysene	140		9.3	4.6	ug/Kg	₩	02/25/13 06:16	02/26/13 17:30	1
Dibenz(a,h)anthracene	21		21	4.2	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
Fluoranthene	150	J	21	4.1	ug/Kg	₩	02/25/13 06:16	02/26/13 17:30	1
Fluorene	8.6	J	21	4.2	ug/Kg	₩	02/25/13 06:16	02/26/13 17:30	1
ndeno[1,2,3-cd]pyrene	58		21	7.3	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
I-Methylnaphthalene	53		41	4.5	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
2-Methylnaphthalene	65		41	7.3	ug/Kg	₽	02/25/13 06:16	02/26/13 17:30	1
Naphthalene	67		41	4.5	ug/Kg	\$	02/25/13 06:16	02/26/13 17:30	
Phenanthrene	120	≱ J	8.2	4.0	ug/Kg	₩	02/25/13 06:16	02/26/13 17:30	1
Pyrene	120	J	21	3.8	ug/Kg	⇔	02/25/13 06:16	02/26/13 17:30	1

TestAmerica Savannah

Analyzed

02/26/13 17:30

Prepared

02/25/13 06:16

Limits

30 - 130

%Recovery Qualifier

95

Dil Fac

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-4

SDG: 68087545-4

Client Sample ID: FM0161VV-CS

Date Collected: 02/14/13 16:09 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-71

Matrix: Solid Percent Solids: 98.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	410	U	410	81	ug/Kg	₩	02/25/13 06:16	02/26/13 17:53	4
Acenaphthylene	27	J	160	20	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Anthracene	47		34	17	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Benzo[a]anthracene	220		33	16	ug/Kg	\$	02/25/13 06:16	02/26/13 17:53	4
Benzo[a]pyrene	180		42	21	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Benzo[b]fluoranthene	320		50	25	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Benzo[g,h,i]perylene	150		81	18	ug/Kg	\$	02/25/13 06:16	02/26/13 17:53	4
Benzo[k]fluoranthene	100		33	15	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Chrysene	280		37	18	ug/Kg	☼	02/25/13 06:16	02/26/13 17:53	4
Dibenz(a,h)anthracene	48	J	81	17	ug/Kg	\$	02/25/13 06:16	02/26/13 17:53	4
Fluoranthene	360		81	16	ug/Kg	☼	02/25/13 06:16	02/26/13 17:53	4
Fluorene	17	J	81	17	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Indeno[1,2,3-cd]pyrene	130		81	29	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
1-Methylnaphthalene	110	J	160	18	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
2-Methylnaphthalene	140	J	160	29	ug/Kg	☼	02/25/13 06:16	02/26/13 17:53	4
Naphthalene	140	J	160	18	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Phenanthrene	270	X	33	16	ug/Kg	₽	02/25/13 06:16	02/26/13 17:53	4
Pyrene	280		81	15	ug/Kg	₩	02/25/13 06:16	02/26/13 17:53	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	113		30 - 130				02/25/13 06:16	02/26/13 17:53	4

Client Sample ID: FM0161WW-CS

Date Collected: 02/14/13 16:15 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-72

Matrix: Solid Percent Solids: 97.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	*	02/25/13 06:16	02/26/13 18:15	1
Acenaphthylene	6.2	J	40	5.1	ug/Kg	₩	02/25/13 06:16	02/26/13 18:15	1
Anthracene	16		8.5	4.2	ug/Kg	₩	02/25/13 06:16	02/26/13 18:15	1
Benzo[a]anthracene	65		8.1	3.9	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Benzo[a]pyrene	57		11	5.3	ug/Kg	≎	02/25/13 06:16	02/26/13 18:15	1
Benzo[b]fluoranthene	95		12	6.2	ug/Kg	₩	02/25/13 06:16	02/26/13 18:15	1
Benzo[g,h,i]perylene	44		20	4.5	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Benzo[k]fluoranthene	32		8.1	3.6	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Chrysene	80		9.1	4.6	ug/Kg	≎	02/25/13 06:16	02/26/13 18:15	1
Dibenz(a,h)anthracene	13	J	20	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Fluoranthene	120		20	4.0	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Fluorene	6.9	J	20	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Indeno[1,2,3-cd]pyrene	38		20	7.2	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
1-Methylnaphthalene	28	J	40	4.5	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
2-Methylnaphthalene	36	J	40	7.2	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Naphthalene	41		40	4.5	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Phenanthrene	83	≥ ′	8.1	3.9	ug/Kg	₽	02/25/13 06:16	02/26/13 18:15	1
Pyrene	92		20	3.7	ug/Kg	⇔	02/25/13 06:16	02/26/13 18:15	1

TestAmerica Savannah

Analyzed

02/26/13 18:15

Prepared

02/25/13 06:16

Limits

30 - 130

%Recovery Qualifier

95

Dil Fac

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-73

Matrix: Solid Percent Solids: 97.7

Client Sample ID: FM0161XX-CS

Date Collected: 02/14/13 16:18 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	400	U	400	80	ug/Kg	\	02/25/13 06:16	02/26/13 18:38	4
Acenaphthylene	160	U	160	20	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Anthracene	34	U	34	17	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Benzo[a]anthracene	68		32	16	ug/Kg	\$	02/25/13 06:16	02/26/13 18:38	4
Benzo[a]pyrene	56		42	21	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Benzo[b]fluoranthene	110		49	24	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Benzo[g,h,i]perylene	49	J	80	18	ug/Kg	\$	02/25/13 06:16	02/26/13 18:38	4
Benzo[k]fluoranthene	25	J	32	14	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Chrysene	110		36	18	ug/Kg	☼	02/25/13 06:16	02/26/13 18:38	4
Dibenz(a,h)anthracene	80	U	80	16	ug/Kg	\$	02/25/13 06:16	02/26/13 18:38	4
Fluoranthene	97		80	16	ug/Kg	☼	02/25/13 06:16	02/26/13 18:38	4
Fluorene	80	U	80	16	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Indeno[1,2,3-cd]pyrene	41	J	80	28	ug/Kg	*	02/25/13 06:16	02/26/13 18:38	4
1-Methylnaphthalene	63	J	160	18	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
2-Methylnaphthalene	100	J	160	28	ug/Kg	☼	02/25/13 06:16	02/26/13 18:38	4
Naphthalene	110	J	160	18	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Phenanthrene	110	₽′	32	16	ug/Kg	₽	02/25/13 06:16	02/26/13 18:38	4
Pyrene	73	J	80	15	ug/Kg	₩	02/25/13 06:16	02/26/13 18:38	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	128		30 - 130				02/25/13 06:16	02/26/13 18:38	4

Client Sample ID: FM0161YY-CS

Date Collected: 02/14/13 16:21 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-74

Matrix: Solid Percent Solids: 95.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Acenaphthylene	6.4	J	42	5.2	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
Anthracene	13		8.8	4.4	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Benzo[a]anthracene	52		8.4	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
Benzo[a]pyrene	44		11	5.4	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Benzo[b]fluoranthene	87		13	6.4	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Benzo[g,h,i]perylene	33		21	4.6	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
Benzo[k]fluoranthene	26		8.4	3.8	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Chrysene	74		9.4	4.7	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
Dibenz(a,h)anthracene	12	J	21	4.3	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
Fluoranthene	82		21	4.2	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Fluorene	6.1	J	21	4.3	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
ndeno[1,2,3-cd]pyrene	30		21	7.4	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
1-Methylnaphthalene	38	J	42	4.6	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
2-Methylnaphthalene	47		42	7.4	ug/Kg	₩	02/25/13 06:16	02/26/13 19:00	1
Naphthalene	51		42	4.6	ug/Kg	\$	02/25/13 06:16	02/26/13 19:00	1
Phenanthrene	79	≥ ′	8.4	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 19:00	1
Pyrene	62		21	3.9	ug/Kg	☼	02/25/13 06:16	02/26/13 19:00	1

TestAmerica Savannah

Analyzed

02/26/13 19:00

Prepared

02/25/13 06:16

Limits

30 - 130

%Recovery Qualifier

97

Dil Fac

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-4

SDG: 68087545-4

Client Sample ID: FM0161ZZ-CS

Date Collected: 02/14/13 16:31 Date Received: 02/16/13 09:03 Lab Sample ID: 680-87545-75

Matrix: Solid

Percent Solids: 96.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	-	02/25/13 06:16	02/26/13 19:23	1
Acenaphthylene	8.2	J	42	5.2	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Anthracene	13		8.7	4.4	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Benzo[a]anthracene	63		8.3	4.0	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Benzo[a]pyrene	55		11	5.4	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Benzo[b]fluoranthene	95		13	6.3	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Benzo[g,h,i]perylene	41		21	4.6	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Benzo[k]fluoranthene	36		8.3	3.7	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Chrysene	80		9.3	4.7	ug/Kg	₩	02/25/13 06:16	02/26/13 19:23	1
Dibenz(a,h)anthracene	15	J	21	4.3	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Fluoranthene	91		21	4.2	ug/Kg	₩	02/25/13 06:16	02/26/13 19:23	1
Fluorene	5.5	J	21	4.3	ug/Kg	₩	02/25/13 06:16	02/26/13 19:23	1
Indeno[1,2,3-cd]pyrene	35		21	7.4	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
1-Methylnaphthalene	44		42	4.6	ug/Kg	₩	02/25/13 06:16	02/26/13 19:23	1
2-Methylnaphthalene	54		42	7.4	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Naphthalene	46		42	4.6	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Phenanthrene	83	X	8.3	4.0	ug/Kg	₩	02/25/13 06:16	02/26/13 19:23	1
Pyrene	73		21	3.8	ug/Kg	₽	02/25/13 06:16	02/26/13 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	86		30 - 130				02/25/13 06:16	02/26/13 19:23	

Client Sample ID: CV0367A-CS-SP

Date Collected: 02/15/13 08:52 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-79

Matrix: Solid Percent Solids: 96.0

analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
cenaphthene	420	U	420	83	ug/Kg	*	02/25/13 06:16	02/26/13 19:46	-
Acenaphthylene	27	J	170	21	ug/Kg	₩	02/25/13 06:16	02/26/13 19:46	
Anthracene	72		35	17	ug/Kg	₩	02/25/13 06:16	02/26/13 19:46	
Benzo[a]anthracene	260		33	16	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
Benzo[a]pyrene	220		43	22	ug/Kg	₩	02/25/13 06:16	02/26/13 19:46	
Benzo[b]fluoranthene	380		51	25	ug/Kg	₩	02/25/13 06:16	02/26/13 19:46	
enzo[g,h,i]perylene	150		83	18	ug/Kg	\$	02/25/13 06:16	02/26/13 19:46	
enzo[k]fluoranthene	110		33	15	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
thrysene	330		37	19	ug/Kg	₩	02/25/13 06:16	02/26/13 19:46	
ibenz(a,h)anthracene	52	J	83	17	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
luoranthene	380		83	17	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
luorene	22	J	83	17	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
ndeno[1,2,3-cd]pyrene	130		83	29	ug/Kg	\$	02/25/13 06:16	02/26/13 19:46	
Methylnaphthalene	220		170	18	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
-Methylnaphthalene	300		170	29	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
aphthalene	190		170	18	ug/Kg	\$	02/25/13 06:16	02/26/13 19:46	
henanthrene	380	≥	33	16	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	
yrene	340		83	15	ug/Kg	₽	02/25/13 06:16	02/26/13 19:46	

TestAmerica Savannah

Analyzed

02/26/13 19:46

Prepared

02/25/13 06:16

Limits

30 - 130

%Recovery Qualifier

118

Dil Fac

TestAmerica Job ID: 680-87545-4

SDG: 68087545-4

Client Sample ID: CV0367B-CS-SP

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 02/15/13 08:27 Date Received: 02/16/13 09:03 Lab Sample ID: 680-87545-80

Matrix: Solid Percent Solids: 88.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	450	U	450	90	ug/Kg	\	02/25/13 06:16	02/26/13 20:08	4
Acenaphthylene	34	J	180	22	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Anthracene	83		38	19	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Benzo[a]anthracene	270		36	17	ug/Kg	\$	02/25/13 06:16	02/26/13 20:08	4
Benzo[a]pyrene	230		47	23	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Benzo[b]fluoranthene	380		55	27	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Benzo[g,h,i]perylene	150		90	20	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Benzo[k]fluoranthene	140		36	16	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Chrysene	320		40	20	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Dibenz(a,h)anthracene	57	J	90	18	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Fluoranthene	410		90	18	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Fluorene	26	J	90	18	ug/Kg	₩	02/25/13 06:16	02/26/13 20:08	4
Indeno[1,2,3-cd]pyrene	140		90	32	ug/Kg	\$	02/25/13 06:16	02/26/13 20:08	4
1-Methylnaphthalene	260		180	20	ug/Kg	₩	02/25/13 06:16	02/26/13 20:08	4
2-Methylnaphthalene	290		180	32	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Naphthalene	200		180	20	ug/Kg	₽	02/25/13 06:16	02/26/13 20:08	4
Phenanthrene	390	≱	36	17	ug/Kg	₩	02/25/13 06:16	02/26/13 20:08	4
Pyrene	370		90	17	ug/Kg	₩	02/25/13 06:16	02/26/13 20:08	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	107		30 - 130				02/25/13 06:16	02/26/13 20:08	4

Client Sample ID: FM0161AAA-CS

Date Collected: 02/15/13 08:32 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-81

Matrix: Solid Percent Solids: 95.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	<u> </u>	02/25/13 06:16	02/26/13 20:31	
Acenaphthylene	11	J	41	5.2	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	
Anthracene	17		8.7	4.3	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	
Benzo[a]anthracene	84		8.3	4.0	ug/Kg	₽	02/25/13 06:16	02/26/13 20:31	
Benzo[a]pyrene	73		11	5.4	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	
Benzo[b]fluoranthene	140		13	6.3	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	•
Benzo[g,h,i]perylene	53		21	4.5	ug/Kg	*	02/25/13 06:16	02/26/13 20:31	
Benzo[k]fluoranthene	39		8.3	3.7	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	
Chrysene	99		9.3	4.6	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	•
Dibenz(a,h)anthracene	17	J	21	4.2	ug/Kg	₽	02/25/13 06:16	02/26/13 20:31	
Fluoranthene	120		21	4.1	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	•
Fluorene	6.4	J	21	4.2	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	•
Indeno[1,2,3-cd]pyrene	49		21	7.3	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	,
1-Methylnaphthalene	52		41	4.5	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	•
2-Methylnaphthalene	61		41	7.3	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	
Naphthalene	59		41	4.5	ug/Kg	₩	02/25/13 06:16	02/26/13 20:31	
Phenanthrene	95	B	8.3	4.0	ug/Kg	₽	02/25/13 06:16	02/26/13 20:31	
Pyrene	100		21	3.8	ug/Kg	⇔	02/25/13 06:16	02/26/13 20:31	

TestAmerica Savannah

Analyzed

02/26/13 20:31

Prepared

02/25/13 06:16

Limits

30 - 130

%Recovery Qualifier

104

Dil Fac

TestAmerica Job ID: 680-87545-4

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

SDG: 68087545-4

Client Sample ID: FM0161BBB-CS

Date Collected: 02/15/13 08:39 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-82

Matrix: Solid Percent Solids: 99.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	₩	02/25/13 06:16	02/26/13 20:53	1
Acenaphthylene	8.9	J	40	5.0	ug/Kg	₩	02/25/13 06:16	02/26/13 20:53	1
Anthracene	15		8.4	4.2	ug/Kg	≎	02/25/13 06:16	02/26/13 20:53	•
Benzo[a]anthracene	62		8.0	3.9	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Benzo[a]pyrene	56		10	5.2	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Benzo[b]fluoranthene	100		12	6.1	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Benzo[g,h,i]perylene	38		20	4.4	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Benzo[k]fluoranthene	33		8.0	3.6	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Chrysene	89		9.0	4.5	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Dibenz(a,h)anthracene	13	J	20	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Fluoranthene	99		20	4.0	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Fluorene	8.6	J	20	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
ndeno[1,2,3-cd]pyrene	33		20	7.1	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
1-Methylnaphthalene	55		40	4.4	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
2-Methylnaphthalene	67		40	7.1	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Naphthalene	83		40	4.4	ug/Kg	\$	02/25/13 06:16	02/26/13 20:53	
Phenanthrene	100	B	8.0	3.9	ug/Kg	≎	02/25/13 06:16	02/26/13 20:53	
Pyrene	78		20	3.7	ug/Kg	₽	02/25/13 06:16	02/26/13 20:53	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	91		30 - 130				02/25/13 06:16	02/26/13 20:53	

Date Collected: 02/15/13 08:47 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Percent Solids: 98.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	<u> </u>	02/25/13 06:16	02/26/13 21:16	
Acenaphthylene	16	J	40	5.0	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	
Anthracene	24		8.4	4.2	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	•
Benzo[a]anthracene	110		8.0	3.9	ug/Kg	*	02/25/13 06:16	02/26/13 21:16	
Benzo[a]pyrene	97		10	5.2	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	
Benzo[b]fluoranthene	220		12	6.1	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	•
Benzo[g,h,i]perylene	61		20	4.4	ug/Kg	*	02/25/13 06:16	02/26/13 21:16	
Benzo[k]fluoranthene	59		8.0	3.6	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	
Chrysene	140		9.0	4.5	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	•
Dibenz(a,h)anthracene	22		20	4.1	ug/Kg	₽	02/25/13 06:16	02/26/13 21:16	
Fluoranthene	140		20	4.0	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	•
Fluorene	7.5	J	20	4.1	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	
Indeno[1,2,3-cd]pyrene	62		20	7.1	ug/Kg	₽	02/25/13 06:16	02/26/13 21:16	
1-Methylnaphthalene	61		40	4.4	ug/Kg	₽	02/25/13 06:16	02/26/13 21:16	
2-Methylnaphthalene	76		40	7.1	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	
Naphthalene	72		40	4.4	ug/Kg	₩	02/25/13 06:16	02/26/13 21:16	
Phenanthrene	110	₽′	8.0	3.9	ug/Kg	₽	02/25/13 06:16	02/26/13 21:16	
Pyrene	110		20	3.7	ug/Kg	⇔	02/25/13 06:16	02/26/13 21:16	

TestAmerica Savannah

Analyzed

02/26/13 21:16

Prepared

02/25/13 06:16

Limits

30 - 130

%Recovery Qualifier

111

Dil Fac